Appl. No. 10/569,029

Amdt. Dated August 11, 2009

Reply to Office Action of May 11, 2009

**Amendments to the Drawings:** 

The attached sheet of drawings includes changes to Figs. 1a, 1b, and 2. On

the attached drawing sheet Figs. 1a and 1b have been modified only to include the

words "Thermal Sensor" to reference numerals 5 and 7. In addition, Fig. 2 has also

been changed so that reference numeral 1", rather than 7, now refers to the

"junction spoke". Also in Fig. 2, reference numeral 1', rather than 1, now designates

the "concentric rings".

Attachments:

Replacement Sheet

**Annotated Sheet Showing Changes** 

The present amendment is submitted in response to the Office Action dated

May 11, 2009, which set a three-month period for response, making this amendment

due by August 11, 2009.

Claims 7-12 are pending in the application.

In the Office Action, claims 7-9 and 10-12 were rejected under 35 U.S.C. 112,

first paragraph, as failing to comply with the enablement requirement. Claims 7-9

were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The

drawings were objected to under 37 CFR 1.83(a) as not showing every feature of the

invention as specified in the claims, specifically, the junction spokes of claims 7 and

10 as well as the vertical rods. The Examiner further requested that elements 5 and

7 should be labeled as "thermal sensors" in Figs. 1a and 1b. Claims 7 and 8 were

rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No.

3,282,469 to Skonberg in view of U.S. Patent No. 7,211,770 to Wilson and U.S.

Patent No. 2,560,795 to Harris. Claim 9 was rejected under 35 U.S.C. 103(a) as

being unpatentable over Skonberg in view of Wilson and Harris, and further in view

of U.S. Patent No. 4,534,493 to Sedran.

The Applicant notes with appreciation the allowance of claims 10-12 if

amended to overcome the rejection under Section 112, first paragraph.

Turning first to the objection to the drawings, filed herewith are amended Figs.

1a, 1b and 2. In Figs. 1 and 1b, the label "thermal sensor" has been added with

reference numerals 5 and 7, as requested by the Examiner. Reference numeral 1,

rather than "7", has been added to Fig. 2 to refer to the "junction spoke". Reference

numeral 1', rather than "1", now designated the "concentric rings".

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Regarding the objection to the "plurality of vertical rods" recited in the claims

and not shown in the drawings, the claims were amended to refer instead to "at least

one vertical rod".

With regard to the continued rejection of claim 7 for lack of enablement, the

Applicant again respectfully disagrees that the feature that "the vertical rods are

unheated" lacks adequate support. Paragraph [0017] of the published application

discloses the following: Note that the vertical rods 6 that connect the heating

elements to the load-bearing arm are not heated: since they remain outside the

product for a long time, if they were heated they would rapidly reach very high

surface temperatures, such as to damage the product when they entered it.

The practitioner skilled in the art would readily be able to connect the vertical

rod to the heating element so that the rod is not actively heated, in contrast to the

preheated delivery tube 10 for the delivery of the product which is heated. While

there might be some heating by thermal conduction, the practitioner would recognize

that any such ancillary heating would not occur to any extent that would cause

damage to the vertical rod, much like a handle of a household cooking pot or pan.

For one skilled in the relevant technology, the non-heating by conducting may

only be a matter of the selection of the relevant materials. The practitioner again

would understand from the specification that the vertical rod is not heated,

specifically, since the rod remains outside of the product for a lengthy time period; if

it were heated, it would rapidly reach a very high surface temperature, which would

damage the product when the rod enters the product.

Further, the clear meaning for one skilled in the art of the phrase "the vertical

rod is not heated" means that the rod itself does not contain any means that

generate heat when powered, such as resistors, for example. As noted above, the

unheated vertical rod can be viewed in contrast to the delivery tube for the delivery of

the product that is heated, for example by circulation of a diathermic fluid within a

jacket positioned coaxially.

With regard to claims 10-12, the Examiner maintains that the specification

does not disclose how the thermal sensors cooperate to control the temperature at

the melting point and then the maintenance temperature. The Applicant respectfully

directs the Examiner's attention to paragraph [0016] of the published application,

which discloses: At this point the heating element is powered, controlling its

temperature by means of a heat sensor 5 applied thereto, at a value T1 sufficient for

melting but such as to avoid a harmful local overheating of the product. Thus, this

paragraph clearly discloses how the temperature of the heating element is controlled

by the heat sensor 5.

Paragraph [0020] of the published application states as follows: The heating

element is therefore kept at the temperature T1 for an additional time, in order to

allow the entire mass to melt. At this point, temperature control passes to a second

sensor 7 mounted on the vertical rods at about one third of their length starting from

the bottom, which regulates the maintenance temperature T2. This paragraph

clearly discloses that the first thermal sensor 5 functions only during the melting

process, while the second thermal sensor 7 functions thereafter for keeping the

melted product at maintenance temperature. One skilled in the relevant art would

understand that these types of processes today are controlled automatically, as

discussed in the present application with regard to the transfer pump 8 (see

paragraph [0021]).

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Amended claims 7 and 10 more clearly define the cooperation of the thermal

sensors.

Also in this amendment, claim 7 has been amended to adopt language similar

to that of allowable claim 10. In this connection, the Applicant respectfully submits

that apparatus claim 7 and its dependent claims 8-9 also should be allowable on the

same basis as applied to method claims 10-12.

As argued previously, the cited combination of references would not lead the

practitioner to the present invention. The claims as amended are believed to more

clearly define the differences between the invention and the combination of the

Skonberg, Wilson and Harris patents argued in the Applicant's last amendment. To

avoid repetition, the Applicant refers to the amendment of February 10, 2009 for a

detailed discussion of these patentable distinctions.

The application in its amended state is believed to be in condition for

allowance. Action to this end is courteously solicited. However, should the

Examiner have any comments or suggestions, or wish to discuss the merits of the

application, the undersigned would very much welcome a telephone call in order to

expedite placement of the application into condition for allowance.

Respectfully submitted,

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